

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) An Aadjustable mechanism for a motor vehicle for adjusting an adjustable part in a motor vehicle, more particularly a seat part, with a spindle nut defining an axis and interacting on the one side with a threaded spindle and on the other side having in an external surface an external toothing through which it engages with a further gearing element,  
~~characterised in that~~ wherein  
the external toothing (15) of the spindle nut (1) is formed through radially inwardly pointing indentations in the external surface (10) of the spindle nut (1) whose tooth depth diminishes towards at least one axial end of the spindle nut (1).
2. (Currently amended) The Aadjustable mechanism according to claim 1, ~~characterised in that~~ wherein the tooth depth of the external toothing (15) decreases to zero at at least one axial end of the spindle nut (1).
3. (Currently amended) The Aadjustable mechanism according to claim 1 ~~or~~ 2, ~~characterised in that~~ wherein the external toothing (15) of the spindle nut (1) extends in the axial direction (a) only over a part of the axial extension of the outer surface (10) of the spindle nut (1) so that the spindle nut (1) has in the axial direction (a) on the other side of the external toothing (15) at least one end section (11, 12) without external toothing.
4. (Currently amended) The Aadjustable mechanism according to claim 3, ~~characterised in that~~ wherein the at least one axial end section (11, 12) of the spindle nut (1) without external toothing is formed substantially as a circular line.
5. (Currently amended) The Aadjustable mechanism according to ~~one of the preceding claims~~ claim 1, ~~characterised in that~~ wherein the external toothing (15) of the spindle nut (1) is

formed by indentations in the external surface (40) of the spindle nut (1) in relation to at least one end section (11,12) of the spindle nut (1).

6. (Currently amended) The Adjustable mechanism according to ~~one of the preceding claims-claim 1~~, characterised in that wherein the spindle nut (1) has in the axial direction (a) either side of the external toothing (15) an end section (11,12) without external toothing.

7. (Currently amended) The Adjustable mechanism according to ~~one of claims 3 to 6~~, characterised in that wherein the spindle nut (1) has an external surface (40) in the form of a cylinder sleeve and that the external toothing (15) is formed by indentations in the external surface (40) whereby the diameter of the at least one end section (11,12) is preferably larger than or equal to the diameter of the external surface (40) which is provided with indentations.

8. (Currently amended) The Adjustable mechanism according to ~~one of claims 3 to 7~~, characterised in that wherein the spindle nut (1) in the region of the external toothing (15) does not project in the radial direction (r) beyond the at least one end section (11,12).

9. (Currently amended) The Adjustable mechanism according to ~~one of the preceding claims-claim 1~~, characterised in that the external toothing (15) is globoid in shape and more particularly has globoid toothing in its axial edge regions (17,18).

10. (Currently amended) The Adjustable mechanism according to ~~one of the preceding claims-claim 1~~, characterised in that wherein the external toothing (15) has an involute profile in a middle section (16) in the axial direction (a).

11. (Currently amended) The Adjustable mechanism according to ~~one of the preceding claims-claim 1~~, characterised in that wherein the spindle nut (1) is made of plastics.

12. (Currently amended) The Adjustable mechanism according to ~~one of the preceding claims-claim 1~~, characterised in that wherein the spindle nut (1) interacts with a worm as a further gearing element (2) through its external toothing (15).

13. (Currently amended) The Aadjustable mechanism according to ~~one of the preceding claims-claim 1, characterised in that~~ wherein the internal toothing (19) of the spindle nut (1) associated with the spindle (100) extends in the axial direction (a) over a greater length than the external toothing (15) so that the internal toothing (19) extends axially up into at least one end section (11, 12).

14. (Currently amended) The Aadjustable mechanism according to ~~one of the preceding claims-claim 1, characterised in that~~ wherein the tooth thickness (d) of the internal toothing (19) of the spindle nut (1) interacting with the threaded spindle (100) is greater than its gap width (e).

15. (Currently amended) The Aadjustable mechanism according to ~~one of the preceding claims claim 1, characterised in that~~ wherein the spindle nut (1) and the further gearing element (2) are mounted in a gearbox housing (3, 4).

16. (Currently amended) The Aadjustable mechanism according to claim 15, characterised in that wherein the gearbox housing (3, 4) is formed by housing parts (31, 32; 41, 42) more particularly in the form of housing plates.

17. (Currently amended) The Aadjustable mechanism according to claim 16, characterised in that wherein the housing parts (31, 32; 41, 42) are connected to one another through push-fit connections (35, 45) and are aligned relative to each other along all spatial directions.

18. (Currently amended) The Aadjustable mechanism according to claim 16 or 17, characterised in that wherein the gearbox housing (3, 4) consists of one or two pairs of opposing housing parts (31, 32; 41, 42).

19. (Currently amended) The Aadjustable mechanism according to ~~one of~~ claims 16 to 18, characterised in that wherein the gearbox housing (3, 4) comprises two external housing parts (41, 42) which have a U-shaped cross-section.

20. (Currently amended) The Aadjustable mechanism according to claim 19, characterised in that wherein the outer housing parts (41, 42) engage round bearing parts (31, 32) mounted opposite one another in the axial direction (a) to support the spindle nut (1).

21. (Currently amended) The Aadjustable mechanism according to claim 20, characterised in that wherein the outer housing parts (41, 42) surround bearing sections (33, 34) of the bearing parts (31, 32).

22. (Currently amended) The Aadjustable mechanism according to one of claims 15 to 21, characterised in that wherein the gearbox housing (3, 4) is of plastics.

23. (Currently amended) The Aadjustable mechanism according to one of claims 15 to 22, characterised in that wherein the gearbox housing has bearing points (33, 34; 46) more particularly in the form of bearing openings for one of the spindle nut (1) and/or the further gearing element (2).

24. (Currently amended) The Aadjustable mechanism according to one of the preceding claims claim 1, characterised in that wherein a bearing collar (13, 14) for supporting the spindle nut (1) protrudes from the axial end sections (11, 12) of the spindle nut (1).

25. (Currently amended) The Aadjustable mechanism according to claim 6 or one of claims 7 to 23 as well in relation to claim 6, characterised in that wherein the end sections (11, 12) serve at the same time as bearings for supporting the spindle nut (1) whereby the axial and radial bearing is produced through a pair of housing parts (41, 42) of a gearbox housing.

26. (Currently amended) The Aadjustable mechanism according to one of claims 15 to 25, characterised in that wherein the gearbox housing (3, 4) has in at least one boundary wall a recess (48, 49) in which one of the spindle nut (1) and/or further gearing element (2) radially engages.

27. (Currently amended) The Aadjustable mechanism according to claim 26, characterised in that wherein the recess (48, 49) is formed through an opening in the relevant boundary wall.

28. (Currently amended) The Aadjustable mechanism according to claim 26, characterised in that wherein the recess is formed through an indentation in the relevant boundary wall.

29. (Currently amended) The Aadjustable mechanism according to one of claims 26 to 28, characterised in that wherein in the gearing housing (3, 4) are formed two recesses (46) set opposite one another across the axis (L) of the spindle nut (1) for the spindle nut (1).

30. (Currently amended) The Aadjustable mechanism according to one of claims 26 to 29, characterised in that wherein in a boundary wall of the gearbox housing (3, 4) a recess (49) is formed for the side of the further gearing element (2) remote from the spindle nut (1).

31. (Currently amended) The Aadjustable mechanism according to one of claims 15 to 30, characterised in that wherein between the gearbox housing (3, 4) and an associated holder (5) of the gearbox housing (3, 4) there is at least one element for acoustic uncoupling which is formed preferably as a resilient element.

32. (Currently amended) The Aadjustable mechanism according to claim 31, characterised in that wherein the elastic elements are moulded, more particularly injected, in one piece on the gearbox housing.

33. (Currently amended) The Aadjustable mechanism according to one of claims 11 to 28, characterised in that wherein between at least one axial end of the spindle nut (1) and the gearbox housing (3, 4) there is a separate reinforcement ring which is preferably mounted on a bearing collar (13, 14) of the spindle nut (1).

34. (Currently amended) The Aadjustable mechanism according to one of claims 15 to 33, characterised in that wherein the housing parts (31, 32; 41, 42) are connected to one another through laser welding.

35. (Currently amended) The Aadjustable mechanism according to claim 34, characterised in that wherein the gearbox housing (3, 4) has internal housing parts (31, 32) and external housing parts (41, 42) whereby the material of the outer housing parts (41, 42) is designed

transparent for the laser beam used for welding, and the material of the inner housing parts (31, 32) is designed non-transparent for the laser beam used so that a connection with the outer housing parts (41, 42) is producible ~~can be produced~~ through partial melting of the inner housing parts (31, 32).

36. (Currently amended) The Aadjustable mechanism according to claims ~~11, 20 and 22~~, ~~characterised in that~~ wherein at least the spindle nut (1) and the bearing plates (31, 32) of the gearbox housing (3, 4) are made together in one injection moulding tool.

37. (Currently amended) The Aadjustable mechanism according to ~~one of the preceding claims~~ claim 1, ~~characterised in that~~ wherein the gearbox housing (3, 4) is set in a holder (5) of U-shaped cross-section by ~~means of~~ which it can be fixed against an associated adjustable part.

38. (Currently amended) A Method for manufacturing an adjustable mechanism with the features of ~~claims 1, 11, 20 and 22~~ claim 1, ~~characterised in that~~ wherein the spindle nut (1) and the bearing parts (31, 32) are made together in one injection moulding tool in a multi-stage injection moulding process.

39. (Currently amended) The Method according to claim 38, ~~characterised in that~~ wherein the spindle nut (1) and the bearing parts (31, 32) are made in the injection moulding tool one after the other through injection moulding whereby the structural assembly unit each previously made remains in the injection moulding tool whilst the next assembly unit to be made is injected.

40. (Currently amended) The Method according to claim 38 ~~or 39~~, ~~characterised in that~~ wherein further parts of the gearbox housing (3, 4) are made in the injection moulding tool whilst the previously made structural assemblies (1, 31, 32) remain in the injection moulding tool.

41. (Currently amended) The Method according to ~~one of~~ claims 7 ~~to 40~~, ~~characterised in that~~ wherein outer U-shaped housing parts (41, 42) of the gearbox housing (3, 4) are made in the injection moulding tool.

42. (Currently amended) ~~The M~~method according to ~~one of~~ claims 38 to 41, characterised in that wherein the further gear element (2) is inserted in the injection moulding tool before the parts (41, 42) of the gearbox housing (3, 4) which are provided for supporting the further gear element (2) are made by injection moulding.

43. (Currently amended) ~~The M~~method ~~according to one of claims 38 to 42~~ for manufacturing an adjustable mechanism with the features of claim 34, wherein the spindle nut and the bearing parts are made together in one injection moulding tool in a multi-stage injection moulding process, and ~~characterised in that~~ wherein before or during the connection of the housing parts (31, 32; 41, 42) by laser welding any axial bearing play between the inner housing parts (31, 32) of the gearbox housing (3, 4) and the spindle nut (1) is removed.

44. (Currently amended) ~~The M~~method according to claim 43, ~~characterised in that~~ wherein the axial bearing play is removed by

- a) applying a defined axial force to the inner housing parts (31, 32)
- b) melting regions of the inner housing parts (31, 32) which are enclosed by the push-in areas (45) of the outer housing parts (41, 42) as well as
- c) terminating the laser welding when the at least one end section (11, 12) of the spindle nut (1) bears against the gearbox housing (3, 4).

45. (Currently amended) ~~The M~~method for mounting an adjustable mechanism (1, 2) mounted in a gearbox housing (3, 4) for a motor vehicle wherein at least one housing part (41) is brought into engagement with a further housing assembly unit (3, 42) and the housing part (41) is fixed against the further housing assembly unit (3, 42) in that material is melted in the engagement area (35, 45) of the housing part (41) with the housing assembly (3, 42), more particularly to assemble an adjustable mechanism according to ~~one of~~ claims 1 to 37, ~~characterised in that~~ wherein the housing part (41) and the further housing assembly (3, 42) are tensioned elastically against one another during the melting.

46. (Currently amended) The Mmethod according to claim 45, ~~characterised in that~~ wherein a tension device engages on one of the housing part (41) and/or the further housing assembly (3, 42) in order to tension the housing part (41) and the further housing assembly (3, 42) relative to one another.

47. (Currently amended) The Mmethod according to claim 46, ~~characterised in that~~ wherein the tension device engages on the associated element (3, 41, 42) of the housing (3, 4) with the interposition of an elastic element (E).

48. (Currently amended) The Mmethod according to claim 47, ~~characterised in that~~ wherein a compression spring is used as the elastic element (E).

49. (Currently amended) The Mmethod according to ~~one of~~ claims 45 to 48, ~~characterised in that~~ wherein the housing part (41) and the further housing assembly (3, 42) are brought into engagement with one another along an installation axis (A).

50. (Currently amended) The Mmethod according to claim 49, ~~characterised in that~~ wherein the engagement area (35, 45) is formed by a push-in area and the housing part (41) and the further housing assembly (3, 42) are brought into engagement with one another by fitting one in the other.

51. (Currently amended) The Mmethod according to claim 49 ~~or 30~~, ~~characterised in that~~ wherein the housing part (41) and the further housing assembly (3, 42) are tensioned against one another along the installation axis (A).

52. (Currently amended) The Mmethod according to ~~one of~~ claims 49 to 51, ~~characterised in that~~ wherein the housing part (41) and the further housing assembly (3, 42) are tensioned relative to one another in a direction (a) which has a direction component transversely to the installation axis (A).

53. (Currently amended) The Mmethod according to claim 52, ~~characterised in that~~ wherein the housing part (41) and the further housing assembly (3, 42) are tensioned relative to one another perpendicular to the installation axis (A).

54. (Currently amended) The Mmethod according to ~~one of claims 45 to 53,~~ characterised in that wherein a second housing part (42) is used as the further housing assembly unit.

55. (Currently amended) The Mmethod according to claim 54, ~~characterised in that~~ wherein the two housing parts (41, 42) are fixed directly one against the other.

56. (Currently amended) The Mmethod according to ~~one of claims 45 to 53,~~ characterised in that wherein the further housing assembly group (3) is housed between the housing part (41) and a second housing part (42) whereby the two housing parts (41, 42) are each brought into engagement with one end side (35) of the housing assembly unit (3) and are fixed against the associated end side (35) in that material of one of the housing part (41, 42) and/or of the housing assembly unit (3) is fused in the engagement area (45) of the relevant housing part (41, 42) with the associated end side (35) of the housing assembly unit (3).

57. (Currently amended) The Mmethod according to claim 56, ~~characterised in that~~ wherein the two housing parts (41, 42) are tensioned relative to each other whereby at least one of the two housing parts (41, 42) is also tensioned relative to the further housing assembly unit (3).

58. (Currently amended) The Mmethod according to claim 46 ~~and 57,~~ characterised in that wherein the two housing parts (41, 42) are tensioned against one another along the installation axis (A).

59. (Currently amended) The Mmethod according to claim 46 ~~and claim 57 or 58,~~ characterised in that wherein the two housing parts are tensioned against one another along the installation axis and wherein the two housing parts (41, 42) are tensioned relative to one another along a direction (a) which has a direction component perpendicular to the installation axis (A).

60. (Currently amended) The Mmethod according to claim 59, ~~characterised in that~~ wherein the two housing parts (41, 42) are tensioned relative to each other along a direction extended perpendicular to the installation axis (A).

61. (Currently amended) The Mmethod according to ~~one of~~ claims 50 to 60, ~~characterised in that~~ wherein the further housing assembly unit (3) is formed by two housing elements (31, 32) which are opposite one another perpendicular to the two housing parts (41, 42).

62. (Currently amended) The Mmethod according to ~~one of~~ claims 45 to 61, ~~characterised in that~~ wherein a housing plate is used for the at least one housing part (41).

63. (Currently amended) The Mmethod according to ~~one of~~ claims 45 to 62, ~~characterised in that~~ wherein during melting of the material in the engagement area (35, 45) the at least one housing part (41) executes a settling movement (s) relative to the further housing assembly unit.

64. (Currently amended) The Mmethod according to claim 63, ~~characterised in that~~ wherein the settling movement (s) takes place in the direction of the elastic pretension.

65. (Currently amended) The Mmethod according to ~~one of the preceding~~ claims 45 to 63, ~~characterised in that~~ wherein the material is melted in the engagement area (35, 45) by means of a laser.

66. (Currently amended) The Mmethod according to claim 65, ~~characterised in that~~ wherein non-melting areas (41, 42) of the housing (3, 4) are made from material which is permeable to the laser beam used.

67. (Currently amended) The Mmethod according to ~~one of~~ claims 45 to 66, ~~characterised in that~~ wherein the duration of the melting process is controlled from a predeterminable criterion.

68. (Currently amended) The Mmethod according to claim 63 ~~or 64 and claim 67~~, wherein the duration of the melting process is controlled from a predeterminable criterion, and

~~characterised in that~~ wherein the duration of the melting process is controlled in dependence on the settling movement (~~s~~) of the at least one housing part (41).

69. (Currently amended) The Mmethod according to claim 68, ~~characterised in that~~ wherein the duration of the melting process is controlled in dependence on one of the speed and/or the dynamics of the settling movement (~~s~~).

70. (Currently amended) The Mmethod according to ~~one of~~ claims 67 to 69, ~~characterised in that~~ wherein the duration of the melting process is controlled in dependence on the change in the reaction force (~~F~~) during tensioning of the at least one housing part (41) relative to the further housing assembly unit (~~3, 42~~).

71. (Currently amended) The Mmethod according to claim 68, ~~characterised in that~~ wherein the duration of the melting process is controlled in dependence on the extent of the settling movement (~~s~~).

72. (Currently amended) The Mmethod according to claim 67, ~~characterised in that~~ wherein the duration of the melting process is already fixed at the start of the melting process.

73. (Currently amended) The Mmethod according to ~~one of~~ claims 45 to 72, ~~characterised in that~~ wherein in the engagement area (~~35, 45~~) of the at least one housing part (41) with the further housing assembly unit (~~3~~) is a clearance (45a) into which flows the melted mass (~~G~~) formed by the melting of the material.

74. (Currently amended) The Mmethod according to claim ~~70 and~~ 73, ~~characterised in that~~ wherein the clearance (~~45a~~) is formed in the push-in area (~~35, 45~~).

75. (Currently amended) The Mmethod according to ~~one of~~ claims 45 to 74, ~~characterised in that~~ wherein the quality of the connection between the at least one housing part (41) and the further housing assembly unit (~~3, 42~~) is monitored during the melting process from the extent of the movement of the housing part (41) relative to the further housing assembly unit (~~3, 42~~).

76. (Currently amended) ~~The M~~method according to claim 63, ~~65 and 75, characterised in that wherein the material is melted in the engagement area by a laser, wherein the quality of the connection between the at least one housing part and the further housing assembly unit is monitored during the melting process from the extent of the movement of the housing part relative to the further housing assembly unit, and wherein the laser power is regulated in dependence on the speed of the settling movement.~~

77. (Currently amended) ~~The M~~method according to ~~one of claims 45 to 74, characterised in that wherein~~ the at least one housing part (41) and the further housing assembly unit (3, 42) are made of plastics.

78. (New) A method for manufacturing an adjustable mechanism with the features of claim 20, wherein the spindle nut and the bearing parts are made together in one injection moulding tool in a multi-stage injection moulding process.

79. (New) A method for manufacturing an adjustable mechanism with the features of claim 22, wherein the spindle nut and the bearing parts are made together in one injection moulding tool in a multi-stage injection moulding process.

80. (New) The method according to claim 57, wherein the two housing parts are tensioned against one another along the installation axis.

81. (New) The method according to claim 46, wherein the two housing parts are tensioned relative to each other whereby at least one of the two housing parts is also tensioned relative to the further housing assembly unit and wherein the two housing parts are tensioned relative to one another along a direction which has a direction component perpendicular to the installation axis.

82. (New) The adjustable mechanism according to claim 7, wherein the spindle nut has in the axial direction either side of the external toothing an end section without external toothing, and wherein the end sections serve at the same time as bearings for supporting the spindle nut

**Docket No.: 56817/M521**  
**Amdt date February 8, 2006**

whereby the axial and radial bearing is produced through a pair of housing parts of a gearbox housing.